IN THE SPECIFICATION:

On page 1, line 1, please amend the paragraph to read as follows:

-- CROSS-REFERENCE TO RELATED APPLICATIONS: This application is a continuation of Application No. 10/074,251 filed on February 14, 2002, now U.S. Patent 6,646,147 B2, the entire content of which is hereby incorporated by reference in this application.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT: NOT APPLICABLE

INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC: NOT APPLICABLE

SEQUENCE LISTING: NOT APPLICABLE --

On page 5, please amend the paragraph beginning on line 1 to read as follows:

-- The term "copper mass" as used herein refers to copper metal in a form which, when present in the chamber, is permeable to the leach liquor and which presents high surface area for contact with the leach liquor to thereby expedite dissolution of the copper. The copper mass may be present for example as a three-dimensional open permeable network, such as a bale of scrap copper comprised of copper wire, copper tubing, copper cabling, copper plates, providing voids between the copper pieces to allow free flow and maximum contact of the leach liquor with the copper. A bale may have a volume of for example about 25-100 cubic feet ~~fee~~. Alternatively, the copper mass may be present in the chamber as smaller irregular shaped pieces resembling "popcorn"("blister shot") having an average dimension of about 1-3", which allow for good permeation of the leach liquor between and around the copper pieces to expedite dissolution thereof. Typically, the ratio of copper surface area to volume of leach liquor for this process versus a standard agitated reactor is about 10-20:1, for example about 15:1.

Advantageously, the dissolution process is done at a temperature between 40° C and 80° C, for example between 45° C and 55° C. --

On page 8, please amend the paragraph beginning on line 11 to read as follows:

The leach solutions are typically re-circulated in the reactor. Most typically, the re-circulation is carried out at a constant rate of about one-tenth of the leach solution volume per minute. The solution concentration of copper (g/l) as a function of dissolution time is shown in Table 2:

On page 11, please amend the paragraph beginning on line 9 and ending on page 12, line 21, to read as follows:

-- EXAMPLE 2

A continuous dissolver assembly (see FIG. 4) was used in the experiments described below. The assembly includes a one-liter size packed-tower dissolver (used in the batch dissolving experiments described above); gravity controller, a temperature controller, a pH monitor, an air flow meter, a circulation pump and a pump for simultaneous withdraw and replenish of solutions. The gravity controller held about 1 liter of the product solution. The solution in the assembly was circulated between the gravity controller and the dissolver at a constant rate of 325 ml/min. Occasionally, CO_2 gas was bubbled through the bottom of the gravity control chamber to adjust the pH of the solution. In all experiments described below, the reaction temperature and specific gravity were controlled at 50°+- 2 C. (i.e., from 48° C to 52° C) and 1.271.+-.0.001 g/ml, respectively. During a continuous dissolving experiment, copper is continuously dissolved and results in a gradual ~~graduate~~ increase of the specific gravity of the copper-containing solution. When the gravity reaches a pre-set value, i.e. 1.272, it triggers a pump to withdraw the product solution and replenish MEA-CO_2 solution simultaneously. The composition of the MEA-CO_2 solution used in all continuous dissolving experiments is the same as that of Exp#1 of batch process (Table 3). The dissolver was charged on a daily basis with 1" pieces of 11-13 AWG scrap copper wires and maintained a total copper loading of 1100-1200 grams at any given period of the experiments. Results are shown below in Table 7 along with the experimental conditions used, and are also presented in FIGS. 5-7. FIG. 5 is a plot showing the copper dissolution rate versus air flow rate in a continuous process at pH 9.8, FIG. 6 is a plot showing the copper dissolution rate versus air flow rate in a continuous process at pH 9.5 and FIG. 7 is a plot showing the copper dissolution rate as a function of pH. --